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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/521,583 | 01/18/2005 | Jochen Eisl | 449122078400 | 2776 |

25227          7590          07/10/2007

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| EXAMINER |
|---|
| TAHA, SHAQ |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2109 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 07/10/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|  | Application No. | Applicant(s) |
| --- | --- | --- |
| | 10/521,583 | EISL ET AL. |
| **Office Action Summary** | Examiner | Art Unit | |
| | shaq taha | 2109 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL.** 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1 - 8* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *4/19/2005.*

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

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## DETAILED ACTION

The instant application having Application No. 10/521,583 has a total of 8 claims

pending in the application; there are 2 independent claims and 6 dependent claims, all of which

are ready for examination by the examiner.

## *Oath/Declaration*

The applicant's oath/declaration has been reviewed by the examiner and is found to

conform to the requirements prescribed in **37 C.F.R. 1.63.**

## *Priority*

As required bye **M.P.E.P. 201.14(c),** acknowledgement is made of applicant's claim for

priority based on applications filed on July 15th, 2002 (EP02/07860).

## *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of

the invention specified in the claims. Therefore, data units and data processing between users

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheet(s) in compliance with 37 CFR 1.121(d) are required in reply to the

Office action to avoid abandonment of the application. Any amended replacement-drawing sheet

should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance

# *Information Disclosure Statement*

As required by **M.P.E.P 609(C)**, the applicant's submissions of the Information Disclosure

Statements dated April 19th, 2004 is acknowledged by the examiner and the cited references

have been considered in the examination of the claims now pending. As required by **M.P.E.P**

**609 C(2)**, a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant

office action.

# *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming
> the subject matter which the applicant regards as his invention.

Claims 1, 2, 3, 5, and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

- Claims 1, 2, 5, and 6 recite the limitation "the preconfigured labeled switch path" and

  "the path" in claim 1. There is insufficient antecedent basis for this limitation in the

  claim.

## *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.      Claims 1 – 8 rejected under 35 U.S.C. 102(e) as being anticipated by Hiller et al. (US

6,445,922)

- Regarding claim 1, Hiller et al teaches a method for transfer of an IP packet over a path from

   a sender over a radio access network to a mobile host, **[A method and system are disclosed**

   **for supporting overlapping IP addresses by sharing a mobile node identifier between an**

   **IWF and a Foreign Agent in a visited data (e.g., wireless) network, (See Abstract)]**;

   comprising: examining, when a home agent receives an incoming data packet determined for

   a mobile host with a destination address, **[For data packets moving in the reverse Mobile**

   **IP traffic direction (from the mobile node), the Foreign Agent uses the mobile node**

   **identifier to identify the correct Home Agent destination by finding the corresponding**

   **Home Agent address in the Visitor List table, (See Abstract)]**;

   if there is a match between the destination address of the packet and a sub network address

   of a foreign agent listed in a list of sub network addresses, **[For forward Mobile IP traffic**

**(to the mobile node), the IWF uses the mobile node identifier to identify the correct**

**mobile node destination by finding the corresponding link identifier in the Mobile**

**Identity table, (See Abstract)];**

stored at the home agent (HA), [**sharing step includes storing said mobile node identifier,**

**along with a mobile node home (IP) address and a Home Agent IP address associated**

**with a mobile node identified by said mobile node identifier, (Column 9, lines 19 – 23)];**

and examining, if there is a match between the destination address and a sub network address

of a foreign agent, whether a preconfigured path from the home agent to the foreign agent

exists, [**The IWF 8 verifies that the mobile node 4's IP address in the registration**

**request message matches the address in the Mobile Identity table 18 and then routes the**

**registration request and NAI to the Foreign Agent 10, (Column 6, lines 26 – 29);**

and sending the packet to the foreign agent on the preconfigured label switched path if a label

switched path to the foreign agent exists, [**Once the mobile node's Home Agent is**

**determined, the Foreign Agent sends the data packet to that Home Agent, (Column 2,**

**lines 48 – 51)].**

- Regarding claim 2, Hiller et al teaches the method according to claim 1, wherein the home

  agent sends the packet to the foreign agent on the preconfigured label switched path, [**Once**

  **the mobile node's Home Agent is determined, the Foreign Agent sends the data packet**

  **to that Home Agent, (Column 2, lines 48 – 51)].**

  by sending the packet over a port of a forwarding interface of the home agent which port is

  used for the path with the path number, [**While communicating with other network nodes,**

**the mobile node communicates across an air interface to a base station, and typically**

**sends and receives data packets over a Point-to-Point Protocol (PPP) link that connects**

**the mobile node to a centralized network element known as an Inter working Function**

**(IWF) that hides cellular specific aspects from the general IP network, (Column 1, lines**

**30 – 36)].**

- Regarding claim 3, Hiller et al teaches the method wherein the home agent examines if there

  is a match between the destination address of the packet and a sub network address of a

  foreign agent if there is an entry in a binding cache of the home agent which entry

  corresponds to the destination address of the incoming packet, **[This invention relates to the**

  **routing of data packets to and from a mobile node in a visited wireless data network**

  **when the mobile node's home address matches the home address of another mobile**

  **node in the same visited network, (Column 1, lines 17 – 20)].**

- Regarding claim 4, Hiller et al teaches the method wherein a handover of a mobile host from

  one foreign agent to an other foreign agent is done without creating or modifying a path

  between the foreign agent and a home agent of the mobile host, **[The Foreign Agent and a**

  **Home Agent (a router located in the mobile node's home network) exchange data**

  **packets between each other via a tunnel, (Column 1, lines 42 – 45)].**

- Regarding claim 5, Hiller et al teaches the method wherein the path is a preconfigured,

  statically administered, and multipurpose label switched path, **[For forward Mobile IP**

traffic (to the mobile node), the IWF uses the mobile node identifier to identify the correct mobile node destination by finding the corresponding link identifier in the Mobile Identity table, (See Abstract)].

- Regarding claim 6, Hiller et al teaches the method wherein the functional entities of mobile IP and multipurpose label switching MPLS are co-located but not correlated in a foreign agent, [The Foreign Agent is unable to ascertain the difference between the two mobile nodes because it relies on the mobile node's home address to determine the Home Agent to which the data packets should be sent -or tunneled. When the two mobile nodes have the same home address, the Foreign Agent cannot perform its normal reverse direction routing functions, (Column 2, lines 6 – 12)].

- Regarding claim 7, Hiller et al teaches the method wherein a foreign agent and a home agent are packet switched nodes of an IP network, [The Foreign Agent and a Home Agent (a router located in the mobile node's home network) exchange data packets between each other via a tunnel, (Column 1, lines 42 – 45)].

- Regarding claim 8, Hiller et al teaches a home agent, [the Foreign Agent uses the mobile node identifier to identify the correct Home Agent destination by finding the corresponding Home Agent address in the Visitor List table, (See Abstract)]; comprising: a memory including a list of sub network addresses of foreign agents, [Preferably through associated storage tables, an IWF and a Foreign Agent in a visited

**data network retrieve and share a mobile node identifier that can differentiate between mobile nodes with identical home addresses, (Column 33 – 37)].**

a comparing device for comparing the destination address of an incoming data packet determined for a mobile host with stored sub network addresses of foreign agents for determining the foreign agent to which the packet is to be sent, **[Once the mobile node's Home Agent is determined, the Foreign Agent sends the data packet to that Home Agent, (Column 2, lines 48 – 51)].**

a device for determining a path for transmission of the packet to the foreign agent by comparing the determined foreign agent address with stored addresses of foreign agents, **[From the Base Station the packet is routed over an ATM trunk group to a Mobile Switching Center (MSC) and Inter working Function (IWF). From the IWF, the packet is transmitted to a Foreign Agent, (Column 3, lines 66 – 67, Column 4, lines 1 – 3)];**

between which foreign agents and the home agent paths exist, **[The Foreign Agent and a Home Agent (a router located in the mobile node's home network) exchange data packets between each other via a tunnel, (Column 1, lines 42 – 45)];**

and an interface for transmitting a packet to a determined foreign agent on a determined, preconfigured path, **[While communicating with other network nodes, the mobile node communicates across an air interface to a base station, and typically sends and receives data packets over a Point-to-Point Protocol (PPP) link that connects the mobile node to a centralized network element known as an Inter working Function (IWF) that hides cellular specific aspects from the general IP network, (Column 1, lines 30 – 36)].**

## *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. US 6, 445,922 Method and system for support of overlapping IP addresses between

an inter working function and a mobile IP foreign agent.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to **Shaq Taha** whose telephone number is 571-270-1921. The

examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **Jeff Pwu** can be reached on 571-272-6798.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shaq Taha

JEFFREY PWU
SUPERVISORY PATENT EXAMINER